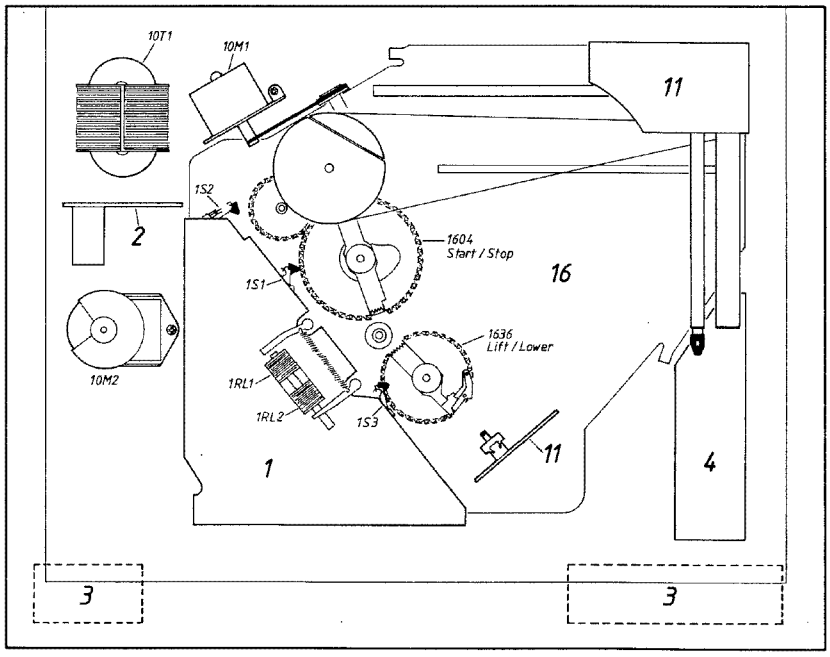
1	µComputer/Control Circuit
2	Power Supply
3	Keyboard Panel
4	RIAA Amplifier
10	Chassis
11	Sliding Chassis
16	Floating Chassis



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TECHNICAL SPECIFICATIONS	BEOGRAM 59XX
Tonearm	Tangential Optimum Pivot Point
Motor	Servo controlled DC
Wow and flutter, DIN	<0.06%
Wow and flutter, WRMS	<0.03%
Rumble DIN weighted	>80 dB
Rumble DIN unweighted	>55 dB
Speeds	33-45 rpm.
Speeds deviation	<0.2%
Power supply	190-265 (90-130) volts
Power frequency	50-60 Hz
Power consumption	<10 watts
Dimensions W x H x D	42 x 7.5 x 32.5 cm
Weight	5.3 kg
RIAA pre-amplifier	Only in Beograms with built-in RIAA
Frequency range	20-20,000 Hz ±1 dB
S/N, A weighted	>80 dB
Distortion 1000 Hz	<0.02%
Output 1000 Hz, 20 cm/sec.	1 V
Output impedance	2 KΩ
Max. cable length	10 meter
Pick-up	MMC 2
Recommended tracking force	1 gram
Frequency range	20-20,000 Hz ±1.5 dB
Channel separation	>25 dB 1000 Hz
Stylus	Contact line nude diamond
Cantilever	Sapphire
ETM	0.3 mg
Compliance	30 µm/mN
Cartridge weight	1.6 gram
Pick-up	MMC 4
Recommended tracking force	1.2 gram
Frequency range	20-20,000 Hz ±2.5 dB
Channel separation	>22 dB 1000 Hz
Stylus	Elliptical diamond
Cantilever	Tapered aluminium
ETM	0.4 mg
Compliance	25 µm/mN
Cartridge weight	1.6 gram
Subject to change without notice	

LIST OF ELECTRICAL PARTS

19	20	24	103	105	113	209

Resistors not referred to are standard see page 3-3

PCB 1, 8005143
Control Circuit

IC1*△	8341180	**113** COP 9421		IC2	8340605	**103** L 272 M
TR1	8320503	**20** BC 557B		TR6	8320423	**19** 92 PU51
TR2	8320497	**20** BC 547B		TR9*	8320396	**24** 2N 5639
TR3-5	8320507	**20** BC 337-25		TR10-11	8320497	**20** BC 547B
D1	8300023	**209** 1N 4002		D9	8300023	**209** 1N 4002
D2	8300169	**209** ZPD 5.1V		D10	8300058	**209** 1N 4148
D3-4	8300058	**209** 1N 4148		D11	8300222	**209** ZPD 2.7V
D7-8	8300058	**209** 1N 4148				
R30	5020501	4.7 Ω 5% 1W		R33	5020704	34.8 kΩ 1% 1/4W
R32	5370328	47 kΩ 20% 0.1W		R34	5370286	10 kΩ 20% 0.1W
C1	4010106	10 nF -20+80% 40V		C22	4010106	10 nF -10+80% 40V
C2	4200522	470 µF -20+50% 16V		C25-27	4010106	10 nF -20+80% 40V
C3	4130233	220 nF 20% 63V		C28	4200517	2.2 µF 20% 50V
C4	4010106	10 nF -20+80% 40V		C29	4010106	10 nF -20+80% 40V
C5	4010107	22 nF -20+80% 40V		C30	4130233	220 nF 20% 63V
C6-7	4010106	10 nF -20+80% 40V		C31-32	4000139	100 pF 5% 63V
C10-14	4010106	10 nF -20+80% 40V		C33	4010106	10 nF -20+80% 40V
C18-20	4010106	10 nF -20+80% 40V		C34	4130230	100 nF 20% 63V
C21	4010105	1 nF 10% 63V		C35	4130233	220 nF 20% 63V
RL1-2	6840031	Coil				
X1	8030024	455 kHz ±1 kHz				
S1-3	7400115	Switch				
P1	7220279	Plug, 2 pins		P4	7220130	Plug, 8/7 pins
P2	7220134	Plug, 2 pins		P5	7220114	Plug, 5/4 pins
P3	7220285	Plug, 3 pins		P6	7210226	Socket, 6 pins

PCB 2, 8005144 Power Supply
¤ 8005154 (type 5903/13/23/33/43/48/53/63/68/72/77

IC1	8340049	**105** 7812			
D1-4	8300023	**209** 1N 4002			
C1-2	4130215	220 nF 20% 63V	C4	4200426	1 uF 20% 50V
C3	4200473	1000 uF 40V			
F1	6600024	Fuse 500 mA			
	7500223	Fuse holder for 500 mA			
	¤ 6600026	Fuse 700 mA			
	¤ 7500214	Fuse holder for 700 mA			
P1	7210103	Socket	P2	7220312	Socket, 2-pole
	7500160	Contact pin for P3			
	7500114	Contact pin for P4			

PCB 3, 8005149
Keyboard
8005150 (type 591X/2X/4X/6X)

	7500131	Switch			

* Specially selected or adapted sample
△ Static electricity may destroy the component.

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51	145	151	217				

Resistors not referred to are standard see page 3-3

PCB 4, 8005269
RIAA Amplifier
(type 5946/47/48/49/50/5X/7X)

IC1△	8341024	**145**	4066	IC3	8341081	**151**	LM883
IC2	8341022	**151**	4558				
TR1-2	8320616	**051**	BC 858B	TR3	8320615	**051**	BC 848B
D1-3	8300482	**217**	LL 4148				
R1	5011595	26.7 kΩ 1% 1/8W		R21	5011616	348 Ω 1% 1/8W	
R2	5011596	301 kΩ 1% 1/8W		R22	5011595	26.7 kΩ 1% 1/8W	
R3	5011616	348 Ω 1% 1/8W		R23	5011596	301 kΩ 1% 1/8W	
C1	4200517	2.2 µF 20% 50V		C10	4100289	2.7 nF 1% 63V	
C2	4010155	220 pF 10% 63		C11	4100231	10 nF 2.5% 63V	
C3	4100289	2.7 nF 1% 63V		C12	4200551	33 µF 20% 16V	
C4	4200551	33 µF 20% 16V		C13-14	4200517	2.2 µF 20% 50V	
C5	4100231	10 nF 2.5% 63V		C15	4010103	2.2 µF 10% 63V	
C6	4200516	47 µF 20% 16V		C16	4200517	2.2 µF 20% 50V	
C7	4200510	10 µF 20% 16V		C17	4010103	2.2 nF 10% 63V	
C8	4200517	2.2 µF 20% 50V		C18-19	4010107	22 nF -20+80% 40V	
C9	4010155	220 pF 10% 63V					

Module 10, Chassis

IL1	8230077	12V 83 mA
M1	8400125	Servomotor complete
M2	8400126	Drive motor complete
	7500114	Contact pin for P2, P5
	7500160	Contact pin for P1, P2
T1	8013334	Transformer w. house 220V/240V EURO
	8013335	Transformer w. house 110V USA
	8013336	Transformer w. house 110V JAP
	8013337	Transformer w. house 240V AUS

Module 11, Sliding Chassis

D1-2	8330116	SLP 153B
R1	5210009	28 KΩ
IL1	8230063	14V 50 mA
S1**	7400293	Switch 2-pole

* Specially selected or adapted sample

** The muting switch has a colour code.
When fitting a new muting switch this colour code must turn the same way as the old one.

△ Static electricity may destroy the component.

Standard Resistors:
Resistors SMD 2% 1/8 W
SMD 5% 1/8 W

	5%	2%	2%	2%	2%	2%	5%	5%
	x1	x10	x100	x1K	x10K	x100K	x1M	x10M
1.0	5011623	5011647	5011218	5011227	5011241	5011256	5011267	5011730
1.1	5011624	5011648	5011669	5011681	5011689	5011694	5011707	
1.2	5011625	5011649	5011219	5011682	5011490	5011257	5011708	
1.3	5011626	5011650	5011670	5011683	5011242	5011258	5011709	
1.5	5011627	5011651	5011220	5011228	5011243	5011259	5011710	
1.6	5011628	5011652	5011671	5011684	5011690	5011695	5011711	
1.8	5011629	5011653	5011672	5011229	5011244	5011260	5011712	
2.0	5011630	5011654	5011673	5011685	5011691	5011696	5011713	
2.2	5011216	5011655	5011674	5011230	5011245	5011261	5011714	
2.4	5011634	5011656	5011675	5011686	5011246	5011697	5011715	
2.7	5011635	5011657	5011497	5011231	5011247	5011262	5011716	
3.0	5011731	5011658	5011499	5011500	5011692	5011698	5011717	
3.3	5011217	5011659	5011676	5011232	5011248	5011263	5011718	
3.6	5011636	5011660	5011677	5011687	5011249	5011264	5011719	
3.9	5011637	5011661	5011221	5011233	5011491	5011699	5011720	
4.3	5011638	5011662	5011498	5011688	5011492	5011700	5011721	
4.7	5011639	5011269	5011222	5011234	5011250	5011265	5011722	
5.1	5011640	5011663	5011678	5011235	5011493	5011701	5011723	
5.6	5011641	5011664	5011223	5011236	5011251	5011702	5011724	
6.2	5011642	5011665	5011224	5011237	5011693	5011703	5011725	
6.8	5011643	5011666	5011225	5011238	5011252	5011704	5011726	
7.5	5011644	5011667	5011679	5011239	5011253	5011705	5011727	
8.2	5011645	5011270	5011226	5011240	5011254	5011266	5011728	
9.1	5011646	5011668	5011680	5011489	5011255	5011706	5011729	

(Glue dots, approx. 200, part no. 3181932).

Resistors 5% 1/2 W

	x1	x10	x100	x1K	x10K	x100K	x1M	x10M
1.0		5011000	5011013	5011028	5011044	5010313	5011069	5011083
1.2	5011406	5011001	5011014	5011030	5011045	5011058	5010421	
1.5	5010727	5011002	5011015	5011031	5011046	5011059	5011071	
1.8	5010857	5010787	5011016	5011033	5011047		5011072	
2.2	5011335	5010708	5010815	5011034	5011048	5011061	5011074	
2.7	5011612	5010803	5011018	5010055	5011049	5011062	5011075	
3.3	5010255	5011007	5011019	5011037		5011063	5010381	
3.9		5010782	5011021	5010700	5011051		5010392	
4.7	5010765	5011009	5011022	5010035	5010036	5011065	5011078	
5.6		5011010	5011023	5011041		5011066	5011079	
6.8	5010874	5011011	5011024	5011042	5010810	5011067	5011080	
8.2		5011012	5011026	5011043	5010038	5011068	5011081	

Resistors 5% 1/4 W

	x1	x10	x100	x1K	x10K	x100K	x1M	x10M
1.0	5010592	5010506	5010065	5010040	5010059	5010049	5010054	5010638
1.2		5010595	5010128	5010153	5010046	5010047	5010665	
1.5	5011348	5010468	5010057	5010247	5010053	5010063	5010093	
1.8		5010822	5010362	5010066	5010135	5010072	5010791	
2.2	5010682	5010448	5010092	5010064	5010079	5010120	5010245	
2.7	5010925	5010403	5010000	5010298	5010141	5010083	5010431	
3.3		5010253	5010044	5010076	5010075	5010117	5010848	
3.9	5011377	5010622	5010070	5010069	5010060	5010073	5010714	
4.7	5010888	5010411	5010058	5010048	5010045	5010077	5011513	
5.6	5010706	5010151	5010067	5010041	5010061	5010071	5010658	
6.8	5010904	5010039	5010144	5010052	5010062	5010074		
8.2	5010880	5010056	5010068	5010154	5010091	5010505		

Resistors 5% 1/8 W

	x1	x10	x100	x1K	x10K	x100K	x1M	x10M
1.0		5011464	5011357	5010816	5010935	5011440	5011459	5020875
1.2		5011351	5011084	5011442	5011338	5011341	5011175	
1.5		5011463	5011443	5011178	5011364	5011398	5011460	
1.8			5011350	5011361	5011344	5011468		
2.2	5011032	5011376	5010886	5011353	5010833	5011369	5011342	
2.7		5011471	5011355	5011362	5011366	5011370	5011478	
3.3		5011347	5011337	5010827	5011346	5011371	5011462	
3.9		5011438	5011817	5011157	5011457	5011372	5020876	
4.7	5011363	5011038	5011441	5011363	5010937	5011343	5011611	
5.6		5011412	5011358	5010885	5011166	5011340		
6.8		5011356	5011336	5010839	5011367	5011458		
8.2		5011466	5011354	5011339	5011368	5011373		

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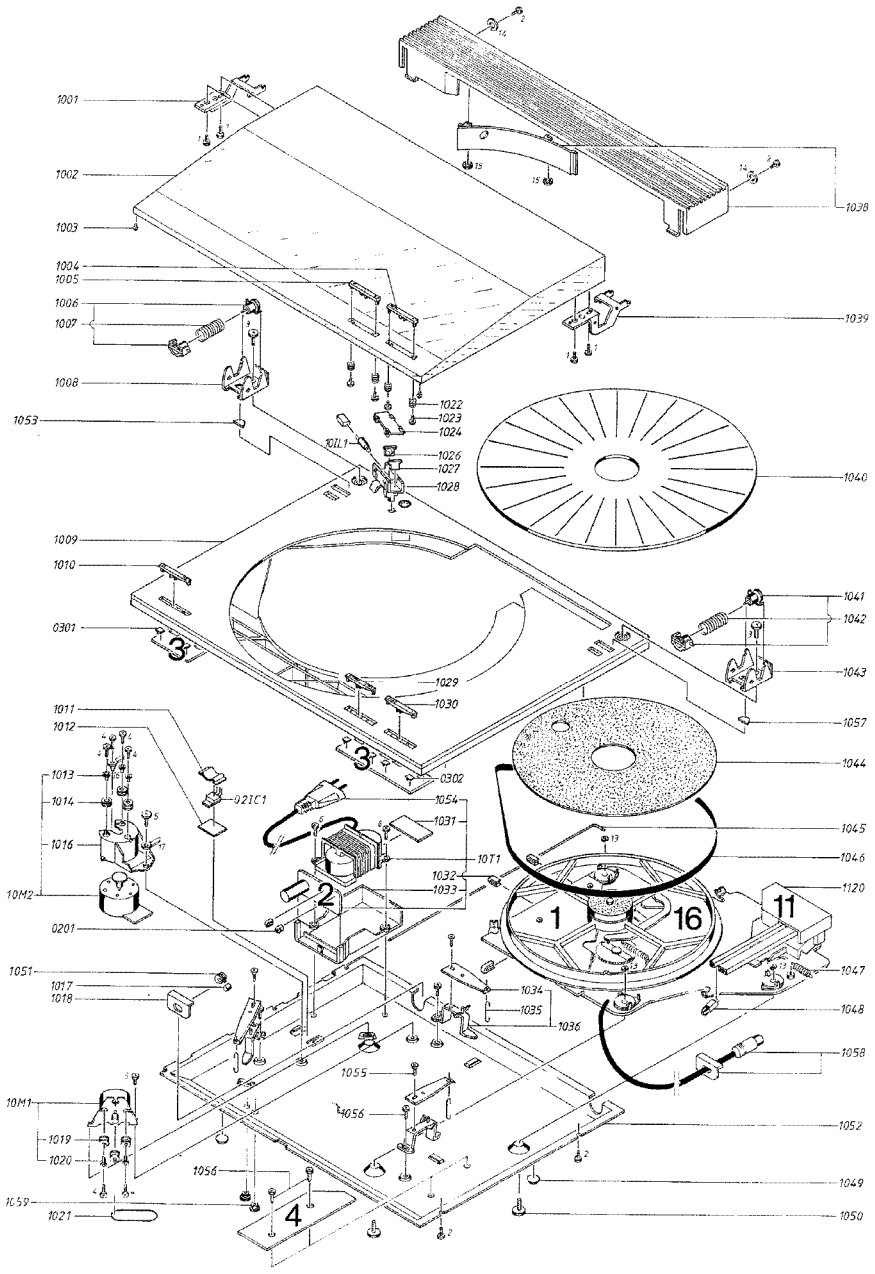
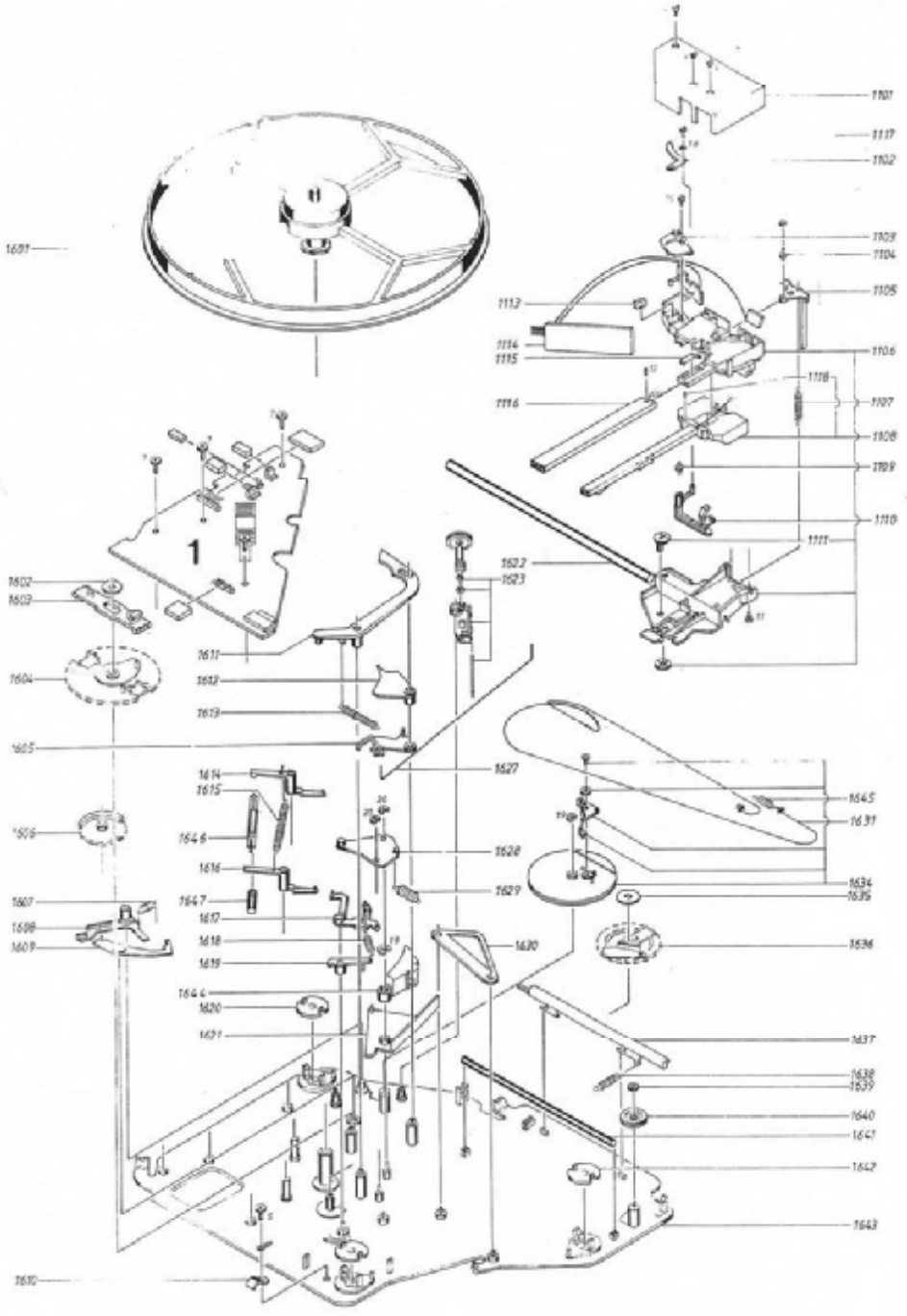
MECHANICAL PARTS

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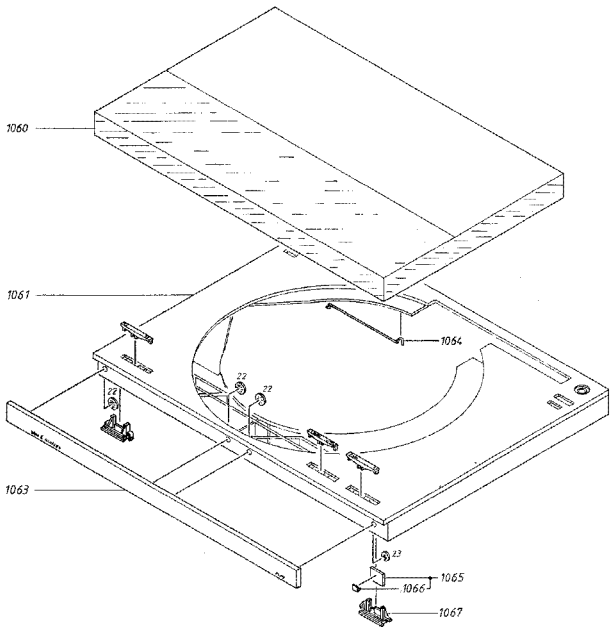


LIST OF MECHANICAL PARTS

1001	2851182	Set of hinges (Incl.pos.no 1039)
1002	3164581	Dust cover BG 3000
	3164663	Dust cover BG 3300
	3164817	Dust cover BG 3500
	3164720	Dust cover BG 4500/9500
	3164815	Dust cover BG 8500
1003	3010007	Stop block
1004	2776061	Button »PLAY«
	2776094	Button BG 3300
1005	2776062	Button »< >«
	2776094	Button BG 3300
1006	3130078	Lid damper
1007	2812104	Spring
	2812107	Spring BG 5005/5500/ 6500/9000
	2812106	Spring BG TX 2
1008	2542618	Hinge
1009	3430347	Chassis BG 3000
	3458613	Chassis BG 3300
	3458725	Chassis BG 3500
	3458618	Chassis BG 4500
	3458722	Chassis BG 8500
	3458708	Chassis BG 9500
1010	2775982	Button »33-45« BG 3000/ 5005/5500/6500/TX 2
	2776077	Button BG 3300
	2776119	Button »33-45« BG 3500/ 4500/8500/9500
	2776112	Button »33-45« BG 9000
1011	2816163	Spring
1012	2622367	Mica sheet
1013	2930074	Bushing
1014	2938237	Bushing
1016	3152392	Holder for motor
1017	2641119	Lock for mains cable (Incl.pos.no 1051)

1018	2530465	Bracket
1019	2938237	Bushing
1020	2930074	Bushing
1021	2732063	Belt
1022	2812100	Spring
1023	3103173	Pin for button
1024	3164556	Cover
1026	3375045	Optics
1027	3375075	Optics
1028	3152409	Holder for lamp
1029	2775984	Button »TURN-LIFT« BG 3000/5005/5500/ 6500/TX 2
	2776118	Button »< >« BG 3500/4500/8500/9500
	2776077	Button BG3300
	2776113	Button »TURN-LIFT« BG 9000
1030	2775983	Button »PLAY« BG 3000/ 5005/5500/6500/TX 2
	2776117	Button »PLAY«
	2776077	Button BG 3300
	2776114	Button »PLAY« BG 9000
1031	3170153	Insulation piece
1032	3152384	Cable holder
1033	3131235	Housing for transformer
1034	2815016	Leaf spring
1035	2514028	Hook
1036	2530479	Bracket for suspension
1038	3452456	Rear plate w. cover BG 3000/ TX 2
	3452478	Rear plate w. cover BG 3300/5005/5500
	3452641	Rear plate W. cover BG 3500
	3452599	Rear plate W. cover BG 4500
	3452637	Rear plate w. cover BG 6500
	3452639	Rear plate w. cover, BG 8500
	3452581	Rear plate w. cover, BG 9000
	3452634	Rear plate w. cover, BG 9500
1039	2851182	Set of hinges (Incl.pos.no 1001
1040	2726001	Platter
	2726158	Platter BG 3300/ 4500/8500/9500
	2726163	Platter, white BG 6500
1041	3130078	Lid lamper
1042	2812104	Spring
	2812107	Spring BG 5005/9000
	2812106	Spring TX 2
1043	2542618	Hinge
1044	2622346	Cover plate
1045	2830112	Shaft
1046	2732062	Belt
1047	2810156	Spring
1048	8954810	Pick-up MMC 1
	8954820	Pick-up MMC 2
	8954830	Pick-up MMC 2-Replacement
	8954840	Pick-up MMC 3
	8954850	Pick-up MMC 3-Replacement
	8954860	Pick-up MMC 4
	8954870	Pick-up MMC 4-Replacement
	8954880	Pick-up MMC 5
	8954890	Pick-up MMC 5-Replacement
1049	3035043	Foot
1050	2042041	Transport screw
1051	2726163	Bushing for mains cable (Incl.pos.no 1017)
1052	3435340	Bottom
	3454340	Bottom (RIAA) BG 4500/ 3500/6500
1053	3010022	Stop block

1054	6271102	Mains cable EURO
	6270251	Mains cable USA
	6271119	Mains cable JAP
	6271091	Mains cable AUS
1055	2039017	Screw AM 3x12
1056	2039006	Screw AM 3x5
1057	3010022	Stop block
1058	6270379	Signal cable w. bracket
	6275573	Signal cable w. bracket USA TX 2
1059	2938220	Bushing
1060	3164583	Dust cover BG 5005/ BG 9000
	3164582	Dust cover BG TX 2
	3164819	Dust cover BG 6500
	3164822	Dust cover, white BG 6500
1061	3458614	Cabinet BG 5005/5500
	3430348	Cabinet BG TX 2
	3458715	Cabinet BG 6500
	3458727	Cabinet, white BG 6500
	3458643	Cabinet, bronce BG 9000
	3458642	Cabinet, white BG 9000
1063	2568841	Front profile BG 5005
	2568980	Front profile BG 5500
	2560104	Front profile BG TX 2
	2569184	Front profile BG 6500
	2569199	Front profile, white BG 6500
	2569077	Front profile, bronzee BG 9000
	2569079	Front profile, white BG 9000
1064	2514047	Support, service BG 5005/5500/6500/ TX 2/BG 9000
1065	6141066	PCB BG 5005/5500/6500/ TX 2/BG 9000
1066	7500131	Contact spring BG 5005/5500/6500/ TX 2/BG 9000
1067	3152428	Holder BG 5005/5500/ 6500/TX 2 BG 9000
	2500013	Wedge BG 9000
10T1	8013334	Transformer w. housin 220V/240V EURO
	8013335	Transformer w. housing 110V USA
	8013336	Transformer w. housing 110V JAP
	8013337	Transformer w. housing 240V AUS
10M1	8400125	Servo motor complete
10M2	8400126	Drive motor complete
10L1	8230077	Lamp 12V
01Modul	8005143	PCB control
02Modul	8005144	PCB power supply
02Modul	8005154	PCB power supply
0201	7500002	Fuse holder
02IC1	8340049	Contact spring
03Module	8005149	Oparation
0301	7500131	Contact spring
0302	7500131	Contact spring

Floating chassis

1601	2794092	Fly wheel
1602	2622370	Washer
1603	2700000	Toothed bar
1604	3017000	Cam lifting wheel
1605	2851155	Shifting lever for record sensing
1606	3017018	Cam wheel
1607	2810154	Spring
1608	2851122	Arm for switch
1609	2851150	Arm
1610	2515046	Cable clamp ø6
	2515045	Cable clamp ø4.5
	2515001	Cable clamp ø5.0
1611	2851121	Arm for automatic stop
1612	2851118	Arm f. cueing
1613	2810161	Spring
1614	2851116	Arm for start-stop
1615	2810157	Spring
1616	2851117	Arm for lift-over
1617	2851165	Arm
1618	2810154	Spring
1619	2851119	Arm for muting
1620	2627014	Washer
1621	2851120	Arm for record sensing
1622	2830110	Shaft
1623	2709005	Clutch
1627	2850129	Pull rod
1628	2570029	Tilting lever f.record sensing
1629	2810156	Spring
1630	2515044	Clamp
1631	3955040	String
1634	2724074	Pulley complete
1635	2622370	Washer
1636	3017025	Cam lifting wheel
1637	2564000	Rail
1638	2810158	Spring
1639	2622379	Washer
1640	2724069	Pulley'
1641	2830109	Shaft
1642	2627014	Washer
1643	3114222	Chassis
1644	2851161	Arm f. 30 cm stop
1645	2810160	Spring
1646	2890000	Piston
1647	3356045	Magnet

Sliding chassis complete

1101	3164544	Cover
1102	2851125	Arm
1103	3164553	Cover
1104	2798004	Eccentric
1105	2851166	Arm
1106	3114243	Chassis
	2834000	Bearing pedestal f. pick-up arm
1107	2810158	Spring
1108	2850133	Pick-up arm
1109	2798005	Eccentric
1110	3150063	Holder
1111	2798000	Eccentric
1113	3375032	Optics
1114	8005145	PCB Muting
1115	2816204	Leaf spring
1116	2850103	Arm
1117	2034070	Screw
1118	2072035	Screw
1120	3114192	Sliding chassis complete

Survey of screws,washers etc.

1	2090206	Screw AM 3x5
2	2039027	Screw AM 3x6
3	2043011	Screw AM 4x8
4	2036016	Screw AM 2.6x6
5	2039006	Screw AM 3x5
6	2039064	Screw M 3x12
7	2013095	Screw M 2.9x9.5
8	2034211	Screw AM 2x6

9	2034069	Screw AM 2x3
10	2034231	Screw AM 2x4
11	2011028	Screw AM 2.5x7
12	2070039	Threaded pin M 2x6
13	2390001	E-ring 2.3
14	2622321	Washer 3.2
15	2390081	Locking ring
16	7530103	Soldering lug
17	7530087	Soldering lug
18	2622110	Washer 2.2
19	2390002	E-ring 3.2
20	2390094	E-ring 1.5
22	2395034	Locking ring
* 22	2500013	Wedge
23	2390001	E-ring

* 591X only

Parts not shown

3397573	Foam packing set
3917089	Foam packing set for PU-arm
3946038	Foam foil, – is sold by the metre
3947180	Transparent foil
3391785	Outer box

Smøreskema

Behovet for eftersmøring er minimalt.
Ved større eftersyn og ved udskiftning af mekaniske dele bør nedenstående retningslinier følges.
NB! Smøremidlet bør kun påføres i lille mængde.

Lubrication Chart

The need for relubrication is negligible.
In the case of overhauls and when replacing mechanical parts the directions below should be followed.
NB! The lubricant should only be applied in small quantities.

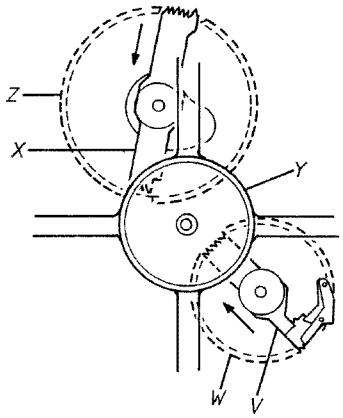
Smørested	Point of lubrication	Smøremiddel Lubricant
Kurvehjul pos. 1604: Påføres den inderste kurve samt banen for microswitch 1S1.	Camwheel pos. 1604: Apply to the inner curve as well as to the rail for micro switch 1S1.	3984030 Barrierta L5512 (25 gr).
Kurvehjul pos. 1636: Påføres den inderste kurve.	Camwheel pos. 1636: Apply to the inner curve.	
Bronzeplade på kurvehjul pos. 1636: Påføres glideflade mellem bronzepladen og den hvide plade.	Bronze plate of camwheel: Apply to sliding surface between the bronze pplate and the white plat.	
Snorhjul pos. 1634: Påføres glideflade mod aksel samt tandkrans (små tænder).	Pulley pos. 1634: Apply to sliding surface towards shaft as well as to toothed rim (small teeth).	
Snortrisse pos. 1640: Påføres glideflade mod aksel	Pulley pos. 1640: Apply to sliding surface towards shaft.	
Kobling pos. 1623: Påføres gevind samt lejer.	Cluth pos. 1623: Apply to thread and bearings.	
Skinne pos. 1637: Påføres glideflade mod arm pos. 1105 i hele skinnens længde samt de to hængsler på skinnen.	Rail pos. 1637: Apply to sliding surface towards arm pos. 1105 in thhe full length of the rail as well as to the two hinges on the rail.	
Arm pos. 1608: Påføres den runde tap.	Arm pos. 1608: Apply to the round tap.	
Adapter glidering på svingring pos. 1601: Påføres glideflade mod vippearm pos. 1628 (Center adapteren trykket i bund).	Adapter sliding ring of fly wheel pos. 1601: Apply to sliding surface towards tilting lever pos. 1628 (the center adapter pressed to the bottom).	
Aksel pos. 1622 og 1641: Påføres en stribe i hele akslens længde.	Shaft pos. 1622 and 1641: Apply in one streak in the full length of the shaft.	
Arm pos. 1619: Ppføres glideflade mod aksel.	Arm pos. 1619: Apply to sliding surface towards shaft.	
Svingchassis pos. 1643: Påføres støbning på chassis under arm pos. 1621 (glideflade mod arm pos. 1621).	Floating chassis pos. 1643: Apply to moulding on chassis below arm pos. 1621 sliding surface towards arm pos. 1621).	
Hængsel pos. 1001, 1008, 1039 og 1043: Påføres bevægelige punkter.	Hinges pos. 1001, 1008, 1039 and 1043: Apply to movable points.	
Låg dæmper pos. 1006 og 1041: Påføres imellem de to dele af lågdæmperen.	Lid dampers pos. 1006 and 1041: Apply between the two parts of the lid damper.	3984005 Rocol Kilopoise 0868S (50 gr).
Centeraksel på svingring pos. 1601: Påføres akslen.	Center shaft of fly wheel pos. 1601: Apply to the shaft.	Isoflex PDB 38CX 2000
Centerleje: Påføres i bunden af lejet.	Center bearing: Apply to the bottom of bearing.	Molycote GN+

JUSTERINGER

Ved visse justeringer er det nødvendigt at foretage pick-up arms transport manuel (uden spænding på apparatet).

ADJUSTMENTS

It is necessary for certain adjustments to make the pickup arm transport manually (no voltage present in the player).



Ind/ud transport af pick-up arm

Tandsektionen X skubbes i pilens retning, og svingringen Y drejes med uret indtil kurvehjulet Z stopper.

In/out travel of the pickup arm

Push the toothed segment X in the direction of the arrow and turn the swing ring Y clockwise until the camwheel Z stops.

Hæv/sænk af pick-up arm

Tandsektionen V skubbes i pilens retning, og svingringen Y drejes med uret indtil kurvehjulet W stopper.

Lift/lower of pickup arm

Push the toothed section V in the direction of the arrow and turn the swing ring Y clockwise until the camwheel W stops.

Hastighed

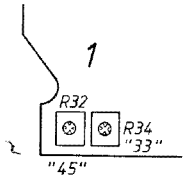
33 Omdr./min. skal justeres først. Justeringen foretages med 1R34 - 45 Omdr./min. justeres med 1R32.

Justeringerne er også tilgængelige fra bunden af apparatet.

Speed

33 r.p.m./min. should be adjusted first. Adjust it with 1R34. Adjust 45 r.p.m./min. with 1R32.

The adjustment resistors are accessible from the bottom of the record player.



Hastigheden kan kontrolleres på to måder:

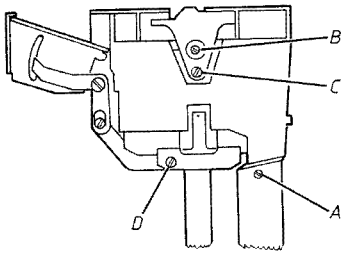
1. Med stroboskive og en lampe tilsluttet lysnettet. Denne kontrol giver en unøjagtighed på ca. 2%, da netfrekvensen på 50 Hz afviger ca. ±1 Hz.
2. Med stroboskive og stroboskoplampe. Denne kontrol giver en nøjagtighed, som svarer til stroboskop lampens tolerance, hvilket normalt er betydelig bedre end netfrekvensen.

The Speed is adjustable in two different Ways:

1. With a stroboscopic disc and a lamp connected to the mains. This check has an inherent inaccuracy of approx. 2% since the 50 Hz mains frequency may deviate approx. ±1Hz.
2. With a stroboscopic disc and a stroboscopic lamp. This check will have an accuracy which corresponds to that of the specifications of the stroboscopic lamp which, normally, are highly superior to those of the mains frequency.

Pick-up arms system

Højde, indikator arm



Med skruen A justeres, indtil afstanden fra oversiden af indikator armen (på spidsen af armen) til svingchassiset er 53 mm.

Pick-up arm højde

Med skruen B justeres, indtil pick-up armen har samme højde som indikator armen.

Pick-up arm parallelitet

Med skruen C justeres, indtil pick-up armen er parallel med indikator armen.

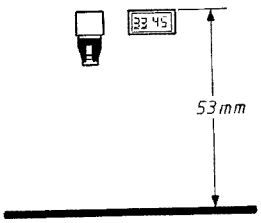
Pick-up parallelitet

Ved udskiftning af pick-up arm er pick-up parallelitet på den nye arm justeret fra fabrikken.

Er det nødvendigt at justere parallelitet, justeres med skruen D indtil siden af pick-upen er retvinklet med pladetallerkenen.

Pickup Arm System

Height, Indicator Arm

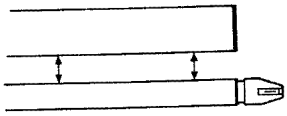


Adjust with the screw A until the distance is 53 mm from the topside of the indicator arm (at the outer end of the arm) to the swing chassis.

Pickup Arm Height

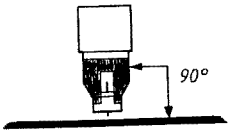
Adjust with the screw B until the pickup arm has the same height as the indicator arm.

Pickup Arm Parallelism



Adjust with the screw C until the pickup arm is parallel with the indicator arm.

Pickup Parallelism

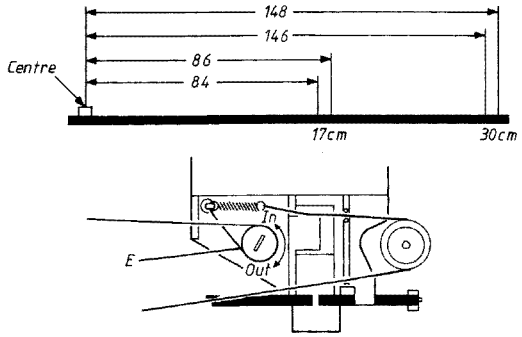


When exchanging pickup arms, the pickup parallelism is factory adjusted.

Should it become necessary to adjust to true the parallelism, adjust with the screw D until the side of the pickup is perpendicular to the turntable.

Pick-up arm nedslag

Pickup Arm Set-down

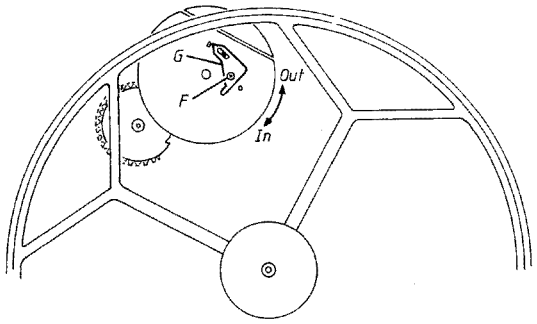


17 cm nedslag justeres først.

Justeringen foretages med eksentrik E.

Adjust the 17 cm set-down first.

Adjust with the eccentric disc E.

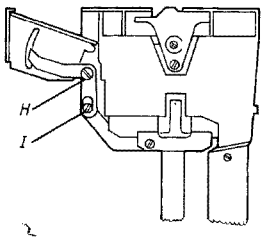


Justering af 30 cm nedslag foretages ved at løsne skruen F, dreje vinklen G og derefter spænde skruen F.

Adjustment for the 30 cm set-down is made by loosening the screw F, turning the arm G and retightening the screw F.

Blænde for photo control

Diaphragm for Photo Control



Justering af blænde foretages med testplade 3621001 i skæring 5.

Pick-up armen køres ind over skæring 5 (stillestående pladetallerken) og sænkes.

Det sikres at blændehuset ikke tilføres falsk lys fra f.eks. en arbejdslampe.

Justeringen foretages ved at løsne skruen H ganske lidt, justere med eksentrik I og derefter spænde skruen H.

Adjustment of diaphragm is made with the test record 3621001 in cutting 5.

Position the pickup arm above cutting 5 (stationary turntable) and lower it.

Take precautions to avoid any stray light, e.g. from a bench lamp.

Make the adjustment by slightly loosening the screw H, adjust eccentric I and then retighten the screw H.

Justeringen foretages således at servoen regulerer første gang imellem 1,5 til 2,5 omdrejninger af pladetallerkenen.

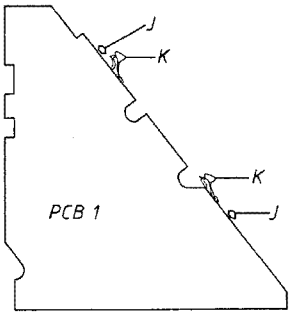
Ved ren afprøvning af servoreguleringen skal servoen regulere indenfor 0,5 til 4 omdrejninger.

Make this adjustment in such a way that the initial servo regulation is between 1.5 and 2.5 turntable turns.

When testing the servo regulation only, the servo shall regulate within 0.5 and 4 turns.

Placering af PCB 1

Positioning of PCB 1



Skub printet mod tappene J.

Kontroller de 2 switche K både ved aktivering og inaktivering. Der skal være bevægelse i switchene både før og efter kontaktpunktet.

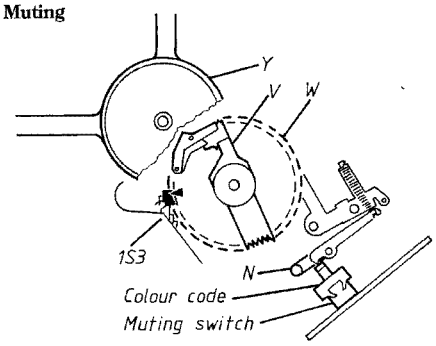
Justering af printets (og dermed switchenes) placering foretages ved at dreje eksentriktappene J.

Push the print to bear against the studs J.

Check the 2 switches K, both when activate and non-active. The switches must be able to move both before and after the point of contact.

Adjustment of the PCB (and thus the switches) is made by turning the eccentric studs J.

Muting



Ohm meter tilsluttes muting switchen som vist, eller ben 2 og 3 på DIN kablet.

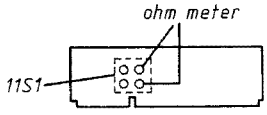
Pick-up armen skal være hævet.

Den tværgående arm V på kurvehjulet W skubbes ind mod centrum, og svingringen Y drejes forsigtigt med uret indtil pilen på kurvehjulet W er ud for knasten på 1S3.

Armen N drejes indtil muting switchen netop afbryder.

NB! Muting switchen er forsynet med en farvekode. Ved montering af en ny muting switch, **skal** denne farvekode vende ind mod båndkablet til PCB 1.

Muting



Connect an ohmmeter to the muting switch as shown, or pin 2 and 3 on the DIN cable.

The pickup arm must be in its lifted position.

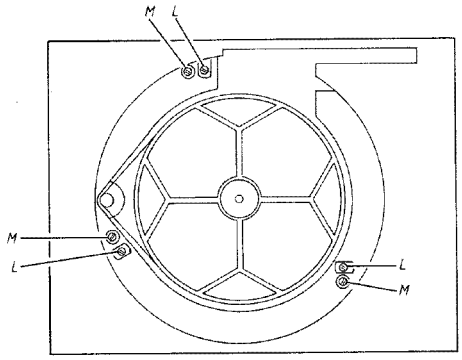
Push the traversing arm V on the camwheel W towards the centre and turn with due care the swing ring Y clockwise until the arrow on the camwheel W is opposite the cam on 1S3.

Turn the arm N until the muting switch just opens.

NOTE! The muting switch has a colour code. When fitting a new muting switch this colour code **must** turn towards the ribbon cable leading to PCB1.

Værk højde og centrering

Turntable Height and Centering



Med skruerne L justeres, til afstanden fra toppladen til oversiden af pladetallerkenen er 2,5 - 3 mm målt med slæden skubbet ind mod centrum.

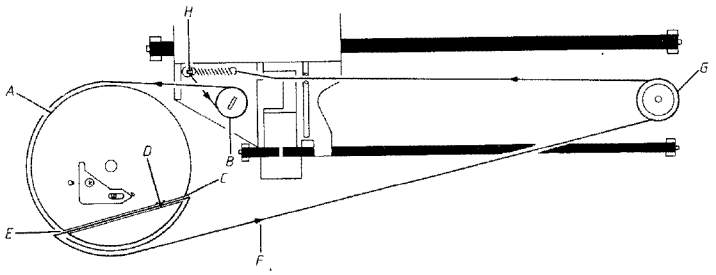
Ved at løsne skruerne M og dreje ophængningsfjedrene, centreres værket i forhold til toppladen.

Adjust with the screws L until the distance from the top plate to the topside of the turntable is 2.5 - 3 mm as measured with the carrier pushed in the direction of the centre.

By loosening the screws M and turning the suspension springs, the drive mechanism is centered in relation to the top plate.

REPARATIONSTIPS

Montering af wiretræk



Drej snorhjulet A mod uret til stop, og før slæden mod centrum til stop.

Den lille løkke på wiren lægges på holderen på slæden, og wiren føres rundt om eksentrik skruen B.

Wiren lægges rundt om snorhjulet A og ind i renden i snorhjulet i punktet C.

Knuden på wiren lægges ned mellem de to „forhøjninger" i renden i punktet D.

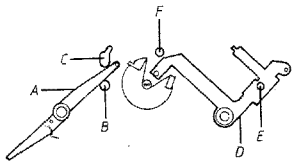
Wiren trækkes ud af renden i snorhjulet i punktet E, og i pilen F's retning rundt om hjulet G.

Den store løkke med fjeder lægges på holderen H, og wiren lægges mellem de to tappe på slæden.

Slæden køres frem og tilbage og wiren skubbes på plads på snorhjulet, således at slæden kører lydløs.

Montering af kurvehjul

Ved montering af kurvehjul kan hullerne i svingchassiset og et hul i kurvehjulene benyttes for at opnå korrekt montering.



Kurvehjul positions nr. 1636

Armen A holdes mellem hullerne B og C.

Armen D holdes således at hullet i armen er ud for hullet E i svingchassiset.

Kurvehjul nr. 1636 monteres således, at hullet i hjulet er ud for hullet F i svingchassiset.

REPAIR HINTS

Mounting of wire drive

Turn the wire pulley A counter-clockwise until its stop and push the carrier towards the centre until its stop.

Place the small wire loop on the holder on the carrier, and lead the wire around the eccentric screw B.

Lay the wire around the wire pulley A and into the groove in the wire pulley at the point C.

Place the knot in the wire between the two "beads" in the groove in the point D.

Lead the wire out of the wire pulley groove at the point E and in the direction of the arrow F around the wheel G.

Place the large loop with spring on the holder H and lay the wire between the two studs on the carrier.

Push the carrier forwards and backwards and and push the wire in place on the wire pulley in such a way that the carrier has a noiseless running.

Fitting of camwheel

For camwheel fitting the holes in the swing chassis and a hole in the camwheel may be utilized to obtain the correct fitting.

Camwheel Part No. 1636

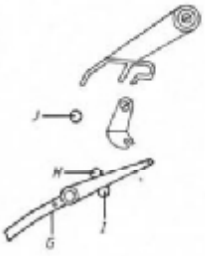
Hold the arm A between the holes B and C.

Hold the arm D so that the hole in the arm is opposite the hole E in the swing chassis.

Fit the camwheel No. 1636 in such a way that the hole in the wheel is opposite the hole F in the swing chassis.

Kurvehjul positions nr. 1604

Camwheel Part No. 1604



Armen G holdes mellem hullerne H og I.

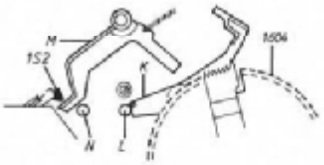
Kurvehjul nr. 1604 monteres således, at hullet i hjulet er ud for hullet J i svingchassiset.

Hold the arm G between the holes H and I.

Fit the camwheel No. 1604 in such a way that the hole in the wheel is opposite the hole J in the swing chassis.

Kurvehjul positions nr. 1606

Camwheel Part No. 1606



Kurvehjul nr. 1604 skal stå i stop position.

Rundingen på armen K skal være ud for hullet L.

Armen M skal holdes mellem hullet N og 1S2.

Kurvehjul nr. 1606 monteres således, at hullet i hjulet er ud for hullet L i svingchassiset.

Camwheel No. 1604 shall be in the stop position.

The radius on the arm K shall be opposite the hole L.

Hold the arm M between the hole N and 1S2.

Fit the camwheel No. 1606 in such a way that the hole in the wheel is opposite the hole L in the swing chassis.

Afmontering af 33 - 45 indikator

Dismantling af 33 - 45 indicator

Montering af pick-up arm

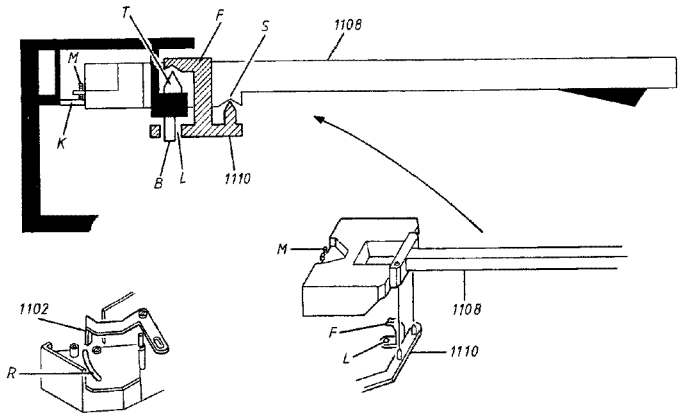
Når dækslet, pos. 1101, er fjernet, skal man ved servicering være forsigtig med at løfte/vende pick-up armen, da den ellers let kan falde af og ødelægge pick-up ledningerne.

Hvis pick-up armen dog skulle falde af, kan følgende måde anvendes ved genmontering.

Fitting of Tone arm

When removing the cover, pos. 1101, during servicing please be careful when lifting/turning the tone arm, as it will otherwise easily fall off and damage the pick-up wires.

In case the tone arm does come off, the following method of refitting can be applied.



Holderen, pos. 1110, løftes op og holdes med en finger oppe i det virtikale lejes.

Derefter løftes pick-up armen, pos. 1108 og 1110, skråt opad og blænderarmen, pos. 1102, vippes ned i det aflange hul R. Justerskruen M løftes op over den lille plastplade K.

Armen vippes nu opad samtidig med at hullet L styres op i knivlejet B. Plastarmen F løftes op på lejet T.

The holder, pos. 1110, is lifted up and by using one finger it is held in the vertical bearing S.

Then the tone arm, pos. 1108 and 1110, is raised at an angle and the diapragm arm, pos. 1102, is tilted into the oblong hole R. Lift the adjustment screw M across the small plastic plate K.

Now tilt the arm upwards at the same time steering the hole L into the knife edge bearing B. The plastic arm F is placed in the bearing T.

ISOLATIONSTEST

Ethvert apparat **skal** isolationstestes efter at det har været adskilt. Testen udføres når apparatet igen er helt samlet og klar til udlevering til kunden.

Isolationstesten udføres på følgende måde:
De to stikben på netstikket kortsluttes og tilsluttes en af terminalerne på isolationstesteren. Den anden terminal fra isolationstesteren tilsluttes stelkappen på signalstikket.

OBS!
For at undgå beskadigelser på apparatet er det vigtigt, at begge terminaler fra isolationstesteren har virkelig god mekanisk kontakt.

Der drejes nu langsomt med spændingsreguleringen på isolationstesteren indtil en spænding på 1,5 - 2 kV er opnået. Her skal den holdes i 1 sekund, derefter drejes der langsomt ned for spændingen igen.

Der må ikke på noget tidspunkt under testen forekomme overslag.

INSULATION TEST

Earch set **must** be insulation tested after dismantling.The test is to be performed when the set has been reassembled and is ready for delivery to the customer.

Make the insulation test as follows:
Short-circuit the two plug pins of the mains plug and connect one of the terminals of the insulation tester. Connect the other terminal of the insulation tester to ground on the signal lead.

N.B.!
To avoid ruining the set, it is essential that both insulator test terminals are in really good mechanical contact.

Now turn slowly the voltage control of the insulation tester until a voltage of 1.5 - 2 kV is obtained. Hold it there for 1 second, then turn slowly the voltage down again.

At no point during the testing procedure any flashovers are permissible.

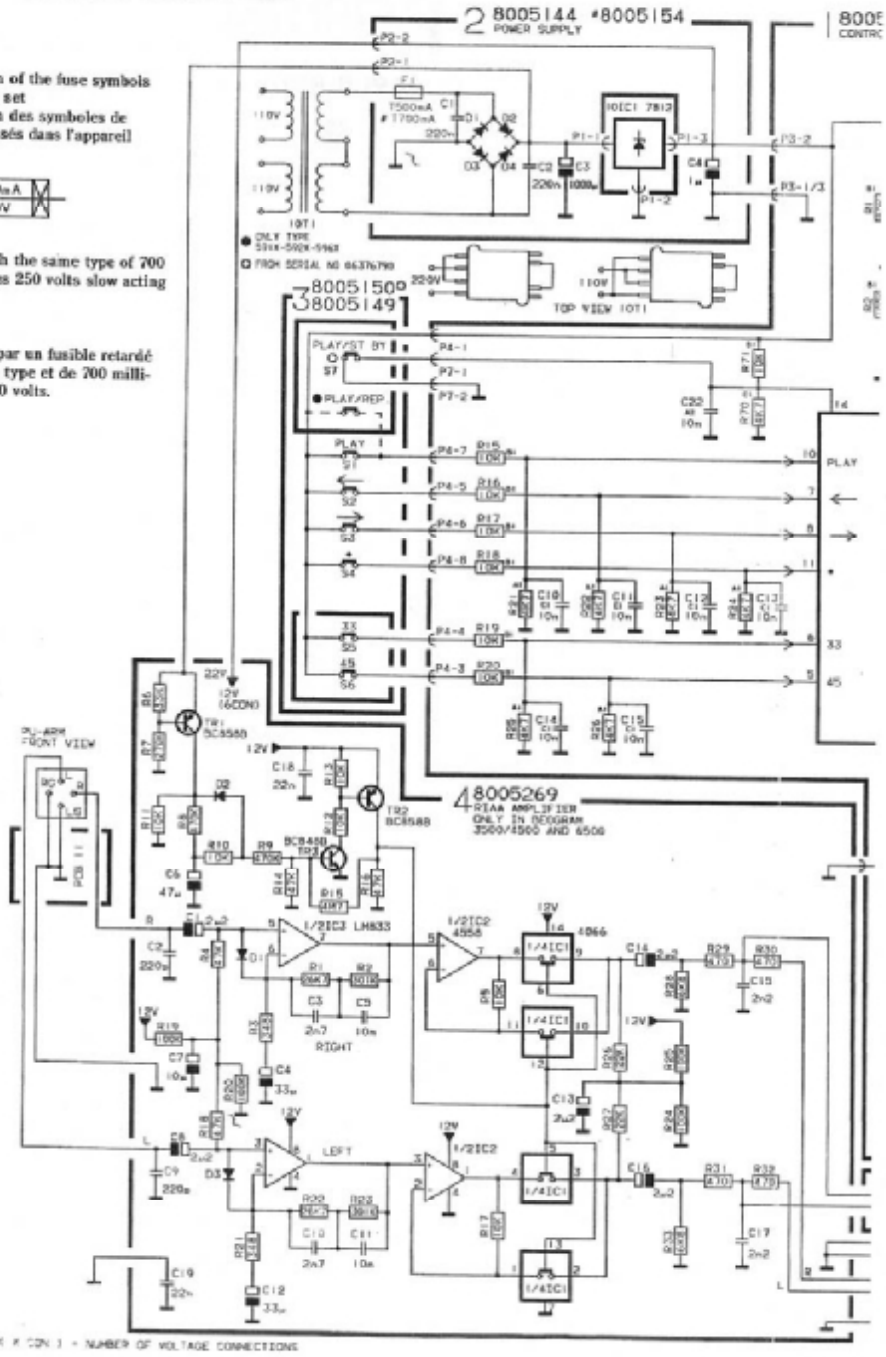
DIAGRAM

PCB 2 US TYPES 8005154, F1 = T700mA

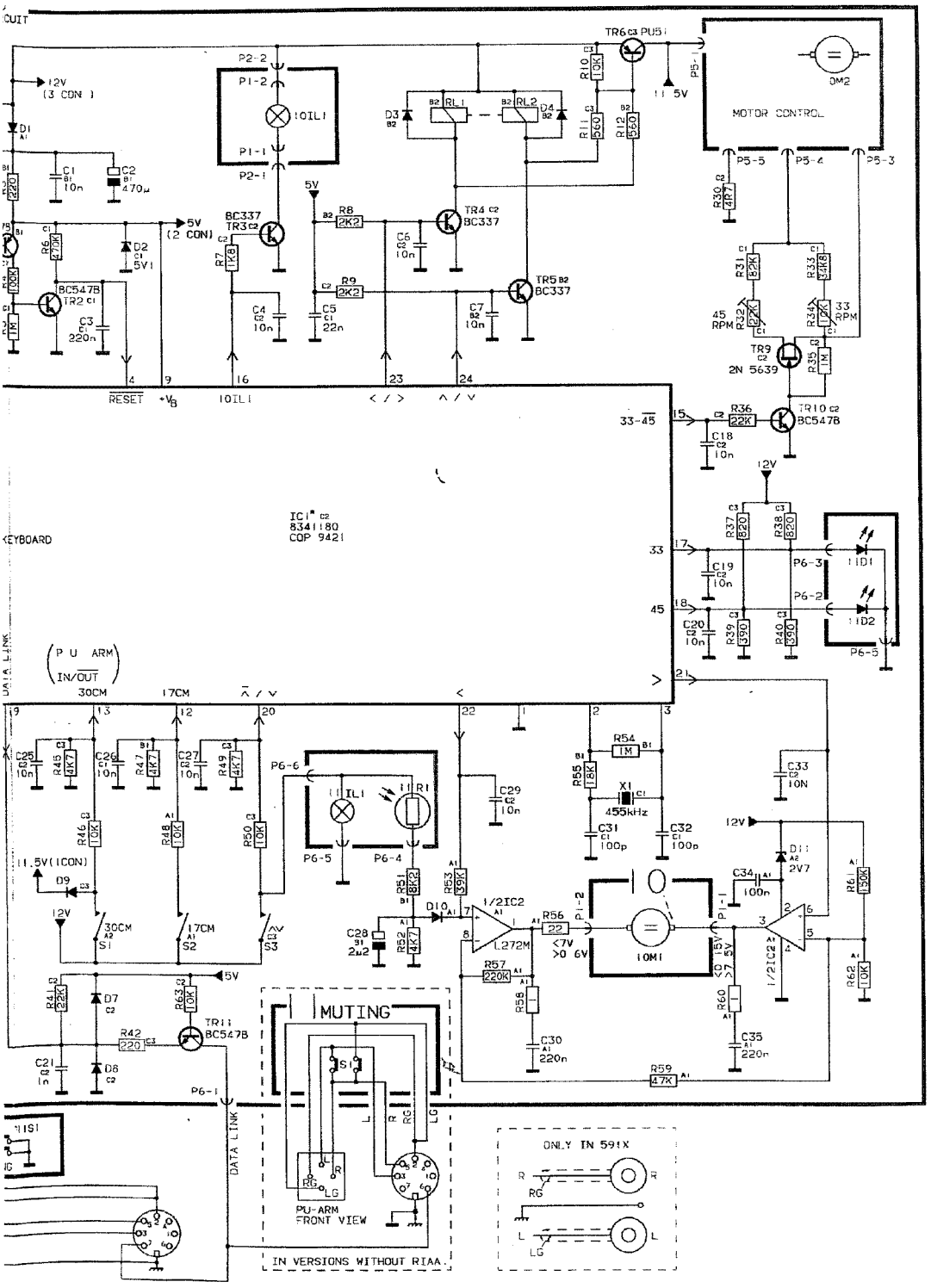
Explanation of the fuse symbols used in the set
Explanation des symboles de fusible utilisés dans l'appareil

Replace with the same type of 700 milliamperes 250 volts slow actiag fuse.

Remplacer par un fusible retardé de la même type et de 700 milli-ampéres 250 volts.



2-1


MOTOR CONTROL
DM2
TR6 PU51
12V (3 CON)
5V (2 CON)
BC337
BC547B
TR4 BC337
TR5 BC337
TR9 2N 5639
TR10 BC547B
RESET
IOIL1
IC1 8341180 COP 9421
KEYBOARD
DATA LINK
P U ARM IN/OUT
30CM
17CM
MUTING
PU-ARM FRONT VIEW
IN VERSIONS WITHOUT RIAA.
ONLY IN 591X
455kHz
L272M
10M1
TR11 BC547B